COOK INLET AND SUSITNA LOWLANDS WETLAND SITE EVALUATION

SU-KNIK ENVIRONMENTAL BANK

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This report is a summary of how we analyzed 16 different groups of land holdings in order to select the proposed Big Lake Region group which we call the proposed Su-Knik Environmental Bank. This summary is from our Phase II Report to the Mat-Su Borough, Department of Community Development, titled: Wetland Bank Scenario – Conceptual Plan Status. Also included is a copy of the minutes from our meeting with the MBRT on March 9, 2004.

We facilitated and ran a meeting on March 9, 2004 with the Mitigation Bank Review Team (MBRT) and Borough representatives in the Mat-Su Borough Planning Department Conference Room. The minutes of that meeting are attached below.

The purpose of the meeting was to identify the Mat-Su land holdings that are the most appropriate for preserving as mitigation banks, and to solicit feedback on the proposed Conceptual Plan. The objectives completed at the meeting included review and evaluation of the assumptions on the Site Selection - Functional Value Matrix (the matrix is attached); discussion of additional assumptions related to site selection; discussion of components of the Conceptual Plan; and the identification of the top three preferred groups of land holdings.

We presented the Conceptual Plan to the MBRT. Our recommendation was to create preservation areas as compensatory mitigation banks for the purpose of compensating for losses related to the wetland 404 permit process. The objective was to select the ecologically finest areas of the four land-holding groups, preserve those areas in perpetuity, and trade credits from the preservation areas to permittees that impact lower quality wetlands in the region. The MBRT members agreed.

The general consensus of the MBRT is that Sustainable Environments LLC should begin a two prong process of investigating, in parallel, the feasibility of creating preservation banking sites on both:

- Private lands that would be acquired either through land swaps, donations and/or direct purchases in the area of Big Lake, Meadow, Lucille, Cottonwood, Fish, 3-Mile, and Wasilla Creeks because these wetlands are under imminent threat of development. However, because this process could take years to accomplish it was suggested that we should also move forward on creating banks on:
- Borough land holdings, in areas where large scale development is a couple of years away so that we do not miss the opportunity to provide compensation opportunity for near-term

404 permit recipients, and to preempt development impacts and realize environmental benefits by preserving prime wetlands.

They recommended that the bank instrument be designed to allow for the addition of bank sites as the initial site credits are used up. An "umbrella" type of banking instrument is needed so that the creation of the banks can be done within a "fluid and dynamic" structure. This type of mitigation banking instrument would allow for flexibility in choosing the most appropriate bank sites over time. Sustainable Environments LLC will likely propose one bank site for immediate certification and propose a series of bank sites for certification over an agreed upon time frame. Over time, credit demand will dictate approval of each consecutive bank. The MBRT will have the flexibility to pick and choose the most appropriate bank site at that time.

The MBRT agreed with the conclusions of our regulatory feasibility analysis. They found no local or state environmental banking regulations, and therefore, no administrative conflicts, that will prevent the successful establishment and operation of a wetland bank. The MBRT confirmed that there are no stakeholder groups opposed to the idea of creating wetland mitigation banks in or around the region of the three proposed areas.

For the Conceptual Plan development process we identified 16 groups of Mat-Su land holdings that have potential for locating wetland banks (Please refer to the attached Matrix). We also evaluated the value of the proposed properties through a regional ecological feasibility assessment. This task required research and analysis of available regional environmental documents (including, local area ordinances, state environmental planning documents, non-profit watershed or environmental interest group environmental plans) that prioritize the ecological needs for improving the health of the watersheds. The best banks are those that, when completed, will contribute the most to achieving regional planning goals. We developed a Functional Value Matrix. Each of the sixteen groups of land holdings were evaluated according to the following fourteen variables:

- Alaska DEC Stream Condition Biological Index
- Threat of Development: Infrastructure, Housing, Mining, or Farming
- Stormwater Storage Capability
- Water Quality Improvement Capability
- Estuarine or Non- Estuarine
- Headwater Wetland Habitat or Not
- Riverine Habitat: Low, Mid, Upper
- Number of Anadromous Fish Use
- Habitat Connectivity
- Waterfowl Habitat Capability
- Recreation Opportunity

We evaluated each group of land holdings according to ranges of values given to each variable. We selected the top four sites based on high score. The variables used in the analysis were selected because they represent the most important characteristics of a bank site relative to

the ecological and economic conditions of the Borough ecosystems. We also selected some variables because of their appeal to the members of the MBRT and our understanding of what the team members will value as important to have at the bank site. The MBRT agreed with our recommendation to eliminate 12 of the 16 groups of Borough land holdings as less appropriate for wetland mitigation banking at this time. Four groups of land holdings contain large wetland areas with functional values significant to the health of several watersheds. The land holdings were also selected because of the potential threat to the loss of their functional values from near-term land development.

Big Lake South/Goose and Fish Creeks
Big Lake West/Little Susitna
Port MacKenzie/Mule Creek
Fish Creek West/Cow Lake Farm Area

We propose that the Big Lake South/Goose and Fish Creeks region of wetland areas be considered as the first area that would be placed into the bank. We refer to this portion of the bank as the Su-Knik Environmental Bank – Big Lake. The Big Lake wetland group is shown in Appendix 1: Map of Preservation Bank Sites.

Wetland Mitigation Bank Pre-Application Meeting
Held on March 9, 2004 in the Mat-Su Borough Planning Department Conference Room.

Attendees

Steve Cypra, Mat-Su
Sue Magee, DNR
John DeLapp, USFWS
Larry Peltz, NMFS
Vandi Leheny, Corps
Skip Joy, Corps
Phil Brna, USFWS
Steve Duncan, EPA
Matt LaCroix, DNR
Jerome Ryan, Sustainable Environments LLC
Kevin Noon, Sustainable Environments LLC
James Hodge, Sustainable Environments LLC

Summary

We eliminated 12 of the 16 groups of Borough land holdings as less appropriate as potential wetland mitigation bank sites. Three groups of land holdings contain large wetland areas with functional values significant to the health of several watersheds. The land holdings were also selected because of the potential threat to the loss of their functional value from near-term development.

The general consensus is that Critical Habitats begin a two prong process of investigating, in parallel, the feasibility of creating preservation banking sites on both:

- Private lands that would be acquired either through land swaps, donations and/or direct purchases in the "Wasilla region corps development zone" because these wetlands are under immediate threat of development. However, because this process could take years to accomplish that we also move forward on creating banks on:
- Borough land holdings, adjacent to the corps development zone, in areas where large scale development is a couple of years away so that we do not miss the opportunity to provide compensation opportunity for near-term 404 permit recipients, and to preempt development impacts by preserving prime wetlands.

Meeting Discussion Notes

The watersheds within the existing corps development area are the key areas of interest to some MBRT members because of their imminent development pressure

Investigate the feasibility of creating a bank by consolidating the remaining wetlands within the existing corps development area

Identify the best bank sites within the near-term development zone immediately adjacent the existing corps development area

The Fish Creek area has long-term potential for establishing a bank site, however the fisheries function does not prioritize the watershed, the creek has few salmon, the pike have devastated the run

An "umbrella" type of banking instrument is needed so that the creation of the banks can be done within a "fluid and dynamic" structure. This type of mitigation banking instrument would allow for flexibility in choosing the most appropriate bank sites over time. Critical Habitats will likely propose two bank sites for immediate certification and propose a series of bank sites for certification over an agreed upon time frame. Over time, credit demand will dictate approval of each consecutive bank. The MBRT will have the flexibility to pick and choose the most appropriate bank site at that time.

A primary concern is accountability for use of compensatory credit funds. Since this banking program is not being set up as an in-lieu fee bank, there will be no accountability problems. The bank will be awarded (by the MBRT) a certain number of credits to trade and sell to debtors. The bank area will be secured before the debtors are permitted to impact wetlands, and before impact credits are traded. Credit accounting records will be kept on every transaction, made available to the MBRT on request, and a summary of transactions will be distributed to the MBRT annually.

An MBRT member suggested that the bank sponsors adopt and manage (as part of a bank plan) mitigations resulting from individual permittee compensations. Since the sites that would be adopted in perpetuity by the bank sponsor will be designed or restored by others (i.e., the sponsors will have no say in their selection, creation, quality, or long-term stability) then the bank sponsors may have to charge the permittees significant management fees. They would not be forced to accept

Some "out-of-kind" trading may be necessary or appropriate and would be approved by the MBRT on a case-by-case basis.

An MBRT member asked if the existence of a bank would increase development. Other MBRT members explained that the existence of a bank would not increase development. The sequencing process (avoidance, minimization, then compensation) required during 404 permit evaluation remains consistent regardless of the availability a bank or not. The existence of a bank does not influence, in any way, the permit decision-making process. The bank is just another type of compensatory mitigation option available to permittees (that need to satisfy their obligation to compensate for permitted impacts) after they have been granted a permit.

Adjustments to the Variables Used in the Evaluation Matrix

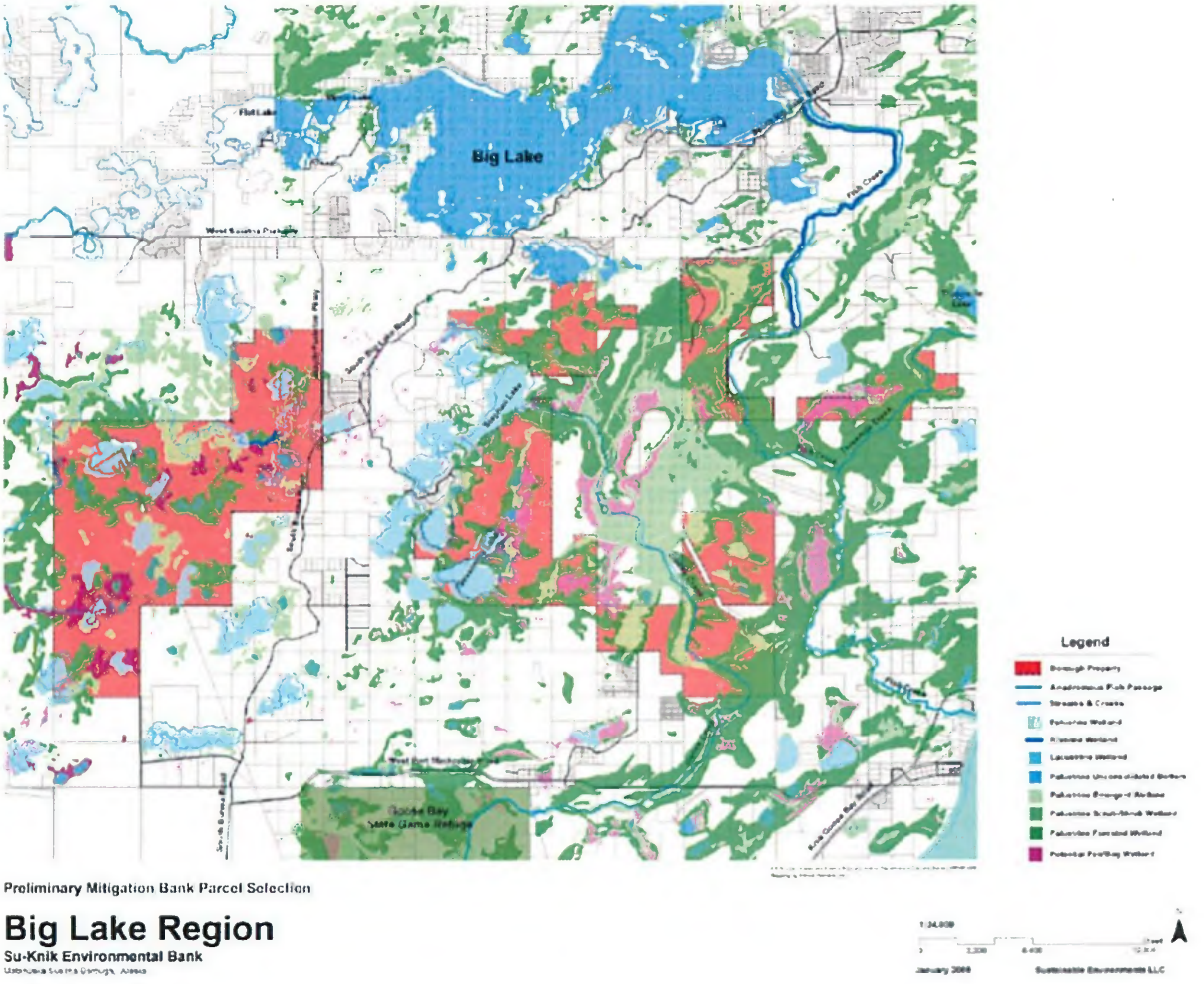
The "threat of development" column on the matrix should move from 6 to 10 points in terms of weighting.

That "anadromous fish", value weighting should be lowered because salmonid habitat is already very protected. There was little discussion of how development impacts to the wetlands contiguous to the populated rivers would affect functional value.

In future evaluations add in recreation use, adjacent/contiguous land uses (both adverse, such as developed, or positive, such as parks or preserved areas), Bald Eagle habitat.

Buffer zone functional value is recognized nationally, the total wetland functioning areas with a reasonable amount of buffer (uplands and riparian zones, as approved by the MBRT) should get full credit value.

Appendix 1: Map of Preservation Bank Sites



Site Selection - Functional Value Matrix

Su-Knik Environmental Bank
Cook Inlet and Susitna Lowlands Wetland Site Evaluation
March 2004

				Functional Values									
		Alaska DEC Stream Condition Biological Index	Total Score	Threat of Development: Infra/housing; Sand/gravel	Stormwater Storage	Water Quality Improvement	Estuarine	Headwater Wetland Habitat	Riverine Habitat: low,mid,upper	Anadromous Fish	Habitat Connectivity	Waterfowl Habitat	Recreation
	Values	Range 1-5		0;2;4;6;8;10	0;1;2	0;1;2	0;2	0;2;4;6	0;1;2;3	0;(1)2;(2)4;(3)6;(4)8;(5)10	0;1;2;3	0;1;2;3	0;1;2;3
	Site												
1	Big Lake South/Fish/Goose Creek	good (5)	33	10	2	2	0	6	0	4	3	3	3
2	Big Lake West/Little Susitna	good (5)	33	8	0	2	0	6	0	8	3	3	3
3	Port MacKenzie/Mule Creek	no data	31	10	1	2	0	6	1	2	3	3	3
4	Fish Creek West/Cow Lake Farm Area	good (5)	30	6	1	2	0	6	1	6	3	3	2
5	Whiskers Creek/Chulitna River	no data	28	2	1	2	0	6	3	8	3	2	1
6	Rabideux/Chulitna River	no data	25	2	0	1	0	4	3	8	3	3	1
7	Willow Creek	fair(3)/good(5)	24	4	0	2	0	0	1	10	2	3	2
8	Palmer Hay Flats/Cottonwood Creek	good(5)/fair(3)	23	0	0	2	2	0	0	10	3	3	3
9	Kashwitna River	no data	21	4	2	1	0	0	1	6	3	3	1
10	Larson Lake-Talkeetna	no data	20	4	1	0	0	0	2	10	0	1	2
11	Little Willow	good (5)	16	2	2	1	0	0	1	3	3	2	2
12	Su-Sunshine	no data	15	0	0	1	0	0	2	10	0	0	2
13	Big Lake East	no data	15	8	2	2	0	0	0	0	0	2	1
14	Deshka/Kroto Creek	no data	13	0	0	0	0	0	1	8	2	1	1
15	Alexander Creek	no data	11	0	0	0	0	0	1	8	0	1	1
16	Long/Nancy Lake/Lake Creek	fair (3)	11	6	2	0	0	0	0	0	0	2	1